

CENTRAL REGIONAL LABORATORY

Data Checklist

Data Set AIR 2002 0053 Cheshire Monitoring Study
PM 10

- ☒ Chain-of-Custody
- ☒ Analysis Request Form(s)*
- ☐ Sample Tags
- ☒ Transmittal Report w/signatures of the following:
 - Analyst (s)
 - Peer Reviewer
 - Environmental Data Coordinator

* Analysis Request Forms provide the data user a means to connect sample numbers with sampling locations

Prepared by: Sylvia Griffin 4-10-02
Data Management Coordinator



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 CENTRAL REGIONAL LABORATORY

536 SOUTH CLARK STREET

CHICAGO, ILLINOIS 60605

Date: APR 10 2002

Subject: Review of Region 5 Data for CHESHIRE MONITORING STUDY

From: **Edgar Santiago, Chemist** *ES*
Region 5 Central Regional Laboratory

To:

ttached are the results for: CHESHIRE MONITORING STUDY

CRL data set number: **20020053**

Samples analyzed for: **Suspended Particles**

Results are reported for sample designations: **2002AH40D01, 2002AH40S01, 2002AH40S02, and 2002AH40S03.**

APR 10 2002

Data Management Coordinator and Date Received

Date Transmitted: APR 10 2002

Please have the U.S. EPA Project Manager/Officer complete the Customer Satisfaction Survey, attached, or call the CRL Sample Coordinator at 3-1226.

Please sign and date this form below and return it with any comments to:

Sylvia Griffin
Data Management Coordinator
Region 5 Central Regional Laboratory
ML-10C

_____/_____/_____
Received by and Date

Comments:

Office of Enforcement

CHAIN OF CUSTODY RECORD

REGION 5
77 West Jackson Boulevard
Chicago, Illinois 60604

[illegible]

5-140045

Project No. Project Name *CHESHIRE MONITORING STUDY* *90107A*
02AH40 *AIR 2020053* *ARRIVAL DATE: 4/4/2002* *DUE DATE: 4/25/2002*

Sampler
Mike Murphy

Cooler ID 1 Page 5-140045

Sample Id:	Station	Date / Time	Grab / Comp	Station Location	No Bottles	Tag Numbers
02AH40D01	D01	27/03/2002 00:00:00	<input type="radio"/> Grab <input checked="" type="radio"/> Com	GHS	1	5-340184 1 to 1

Bottle No. 1

Parameter
PM10

Sample Id:	Station	Date / Time	Grab / Comp	Station Location	No Bottles	Tag Numbers
02AH40S02	S02	27/03/2002 00:00:00	<input type="radio"/> Grab <input checked="" type="radio"/> Com	RVHS	1	5-340185 1 to 1

Bottle No. 1

Parameter
PM10

Sample Id:	Station	Date / Time	Grab / Comp	Station Location	No Bottles	Tag Numbers
02AH40SO1	SO1	27/03/2002 00:00:00	<input type="radio"/> Grab <input checked="" type="radio"/> Com	GHS	1	5-340183 1 to 1

Bottle No. 1

Parameter
PM10

Sample Id:	Station	Date / Time	Grab / Comp	Station Location	No Bottles	Tag Numbers
02AH40SO3	SO3	27/03/2002 00:00:00	<input type="radio"/> Grab <input checked="" type="radio"/> Com	ADDAVILLE	1	5-340186 1 to 1

Bottle No. 1

Parameter
PM10

ENVIRONMENTAL PROTECTION AGENCY
REGION V
CENTRAL REGIONAL LABORATORY
FINAL RESULT REPORT FOR THE TEAM: ANALYTICAL AND INORGANIC (A&I)

DIVISION/BRANCH: AIR DIVISION SAMPLING DATE: 03/27/2002 LAB ARRIVAL DATE: 04/04/2002 DUE DATE: 04/25/2002
DU NUMBER: 90101A DATA SET NUMBER: 20020053 STUDY: CHESHIRE MONITORING STUDY PRIORITY: 1 LABORATORY :CRL

SAMPLE #	CRL LOG NUMBER	SAMPLE DESCRIPTION	SUSPENDED PARTICLE (g/filter)			
1	2002AH40D01	GUIDING HANDS SCHOOL	0.0156			
2	2002AH40S01	GUIDING HANDS SCHOOL	0.0162			
3	2002AH40S02	RVHS	0.0168			
4	2002AH40S03	ADDAVILLE	0.0194			
DATE OF ANALYSIS			04/08- 09/2002			
ANALYST			ES			

Reviewed by: FWA Date: 4/9/2002

Page 1 of 1

CRL SOP: HK015	Date: 07 January 2000	Revision No: 1
Data review for the Analytical and Inorganic Group	Page 9 of 9	

ATTACHMENT II

CRL Analytical and Inorganics Data Review Checklist

Batch Number: 20020053 Facility: CHESHIRE
 Parameter: PM10 CRL.SOP: AIG 047

Package Overview:	YES	NO
Raw Data Package Complete?	✓	
Results Reported Correctly?	✓	
Special Requests Done?	N/A	
Calculations Checked?	✓	
Calibration Not Exceeded?	N/A	
Manual Peak Integration performed? Circle one IC or GC and Check	N/A	
Field QC Checked?	N/A	
Quality Control:		
Holding Times Met?	✓	
Preservation Checked?	N/A	
Proper Digestion Verified?	N/A	
Initial Instrument Performance Checks Verified?	✓	
Calibration Verification Checked?	N/A	
Sample-Specific QC (Internal Standards or Analytical Spikes) Okay?	N/A	
Matrix QC Checked?	N/A	
Digestion Blanks Checked?	N/A	
Spiked Blank Checked?	N/A	
LCS (if applicable) Checked?	N/A	
QCS (if applicable) Checked?	N/A	
Final Check		
Technical Review Done?	✓	
Narrative Complete?	✓	

Analyst: ES Peer Reviewer: MTA

Date: 4/9/02 Date: 4/9/2002

Comments Attached? (Y/N) N

Data Set Number:	<u>20020053</u>	Parameter:	<u>Suspended Particles</u>
Facility Name:	<u>CHESHIRE MONITORING STUDY</u>		
Study Name:	<u>CHESHIRE MONITORING STUDY</u>		
Date of Narrative:	<u>04/09/2002</u>	Analyst:	<u>ES</u>
		Signature:	<u>ES</u>

ANALYSIS CASE NARRATIVE

Four (4) exposed filters were received for suspended particle analysis at the Central Regional Laboratory (CRL) on April 04, 2002. Those filters were fractions of clean filters, prepared at the CRL and sent to the field for exposure. Filter identification numbers and other pertinent information obtained from the individual filters and packaging envelopes are presented in the table below.

Filters ID	Samples ID	Tag Number
Q6279978	2002AH40D01	5-340184
Q6279974	2002AH40S01	5-340183
Q6279979	2002AH40S02	5-340185
Q6279973	2002AH40S03	5-340186

Filter equilibrations and final weighting of exposed filters were performed according to CRL.SOP AIG047. Analysis of exposed filters began on 04/08/2002 and was completed on 04/09/2002. All exposed filters were in good conditions. No sampler sn number was provided for filters Q6279979 and Q6279973 (CRL sample I.D number 2002AH40S02 and 2002AH40S03).

QUALITY CONTROL (QC):

Analysis results were evaluated using the QC requirements of CRL.SOP AIG047. All the required quality control criteria for the laboratory, method, and system performance audits were evaluated and determined to be within the limits.

SAMPLE RESULTS:

All the sample results are acceptable for use.

ELECTRONIC DATA:

No electronic data.

CHESHIRE AIR MONITORING PROJECT

PM10

Parameter: Suspended Particles

Data Set Numbers: 20020052, 20020053

Date of Analysis 03/08- 09/2002

Analyst: ES

BALANCE VERIFICATION:

Standard Weights	Balanced weight	Differences
Actual (g)	Balanced (g)	(g)
Limit +/-0.0005 g		
1.0000	1.0000	0.0000
2.0000	2.0001	-0.0001
5.0000	5.0001	-0.0001

QC-SUMMARY FOR EXPOSED FILTERS

Filter ID	CRL Sample	Analysis	ANALYST	Exposed
Number	I.D Number	Date		weight (g)
Q6279978	2002AH40D01	03/09/02	Analyst 1	4.3442
Q6279978	2002AH40D01	03/09/02	Analyst 2	4.3441
Differences (Limit +/- 5 mg).....				0.0001

CHESHIRE AIR MONITORING PROJECT
PM10

Filter ID	CRL Sample	Sampling	Station	Sampler	Pstg	P1/Pa	Total	Pre Weight	Exposed	Weight	PM10
Number	I.D Number	Date	Location	SN	Avg		Volume (M^3)	of filters (g)	weight (g)	Gain	(UG/M^3)
Data set Number 20020053											
Q6279978	2002AH40D01	03/27/02	Guiding Hands School	3013	18.80		0.00	4.3286	4.3442	0.0156	ERR
Q6279974	2002AH40S01	03/27/02	Guiding Hands School	3012	18.75		0.00	4.3368	4.3530	0.0162	ERR
Q6279979	2002AH40S02	03/27/02	RVHS		18.65		0.00	4.3413	4.3581	0.0168	ERR
Q6279973	2002AH40S03	03/27/02	Addaville		19.50		0.00	4.3615	4.3809	0.0194	ERR

US EPA Region 5 Field Sample

5-340183-1

Parameters PM10

ATK 20020053

Preservative None S M MD B D

Sample ID 02AH40SO1 X

Sampler M.J. Murphy

Date 3-27-02

AIRS

M-10

OPERATOR OLENA

DATE 3-27-02

SP

SITE CHH 3012 Q6777774

AVG. RECORDER RESP

18.75

TEMP

°C

K

FINAL WT

g

LAPSED TIME

1440

MINUTES

PRESS

mmHg

INITIAL WT

g

LOW

m³/min

TOTAL FLOW

m³

SAMPLE WT

g

STD

ACTUAL

PM-10

µg/m³

COMMENTS:

US EPA Region 5 Field Sample
 5-340184-1
 Parameters PM10
 AIR 2002053
 Preservative None S M MD B D
 Sample ID 02AH40D01 X
 Sampler M. J. Murphy
 Date 3-27-02

AIRS

PM-10 ✓ OPERATOR OLPA DATE 3-27-02

TSP ✓ SITE GHS # 3013 Q 6229925

AVG. RECORDER RESP. 18.8 TEMP °C K FINAL WT g

ELAPSED TIME 440 MINUTES PRESS mmHg INITIAL WT g

FLOW m³/min TOTAL FLOW m³ SAMPLE WT g

STD ACTUAL PM-10 ug/m³

COMMENTS:



STEELESVILLE

Figure 6

ORANGE

DATE 01-27-02

THE CORNER DESP

1845

THE

FINAL CUT

1995

1740

MINUTES

WITH A

nothin'

TO MY FLOW

SAVED BY THE

200



US EPA Region 5 Field Sample



5-340185-1

Parameters PM10

AK 2012 053

**D
B
N
S**

Preservative None

Sample ID 02AH40502

Sampler M. J. May

Date 3-27-02

US EPA Region 5 Field Sample

5-340186-1

Parameters PM10

Preservative None S M M D B D

Sample ID 02AH40SO3 X

Sampler M.J. Murphy

Date 3-27-02

AIRS

PM-10

ISP

SITE Address Q 6279975

OPERATOR CLEPA DATE 3-27-02

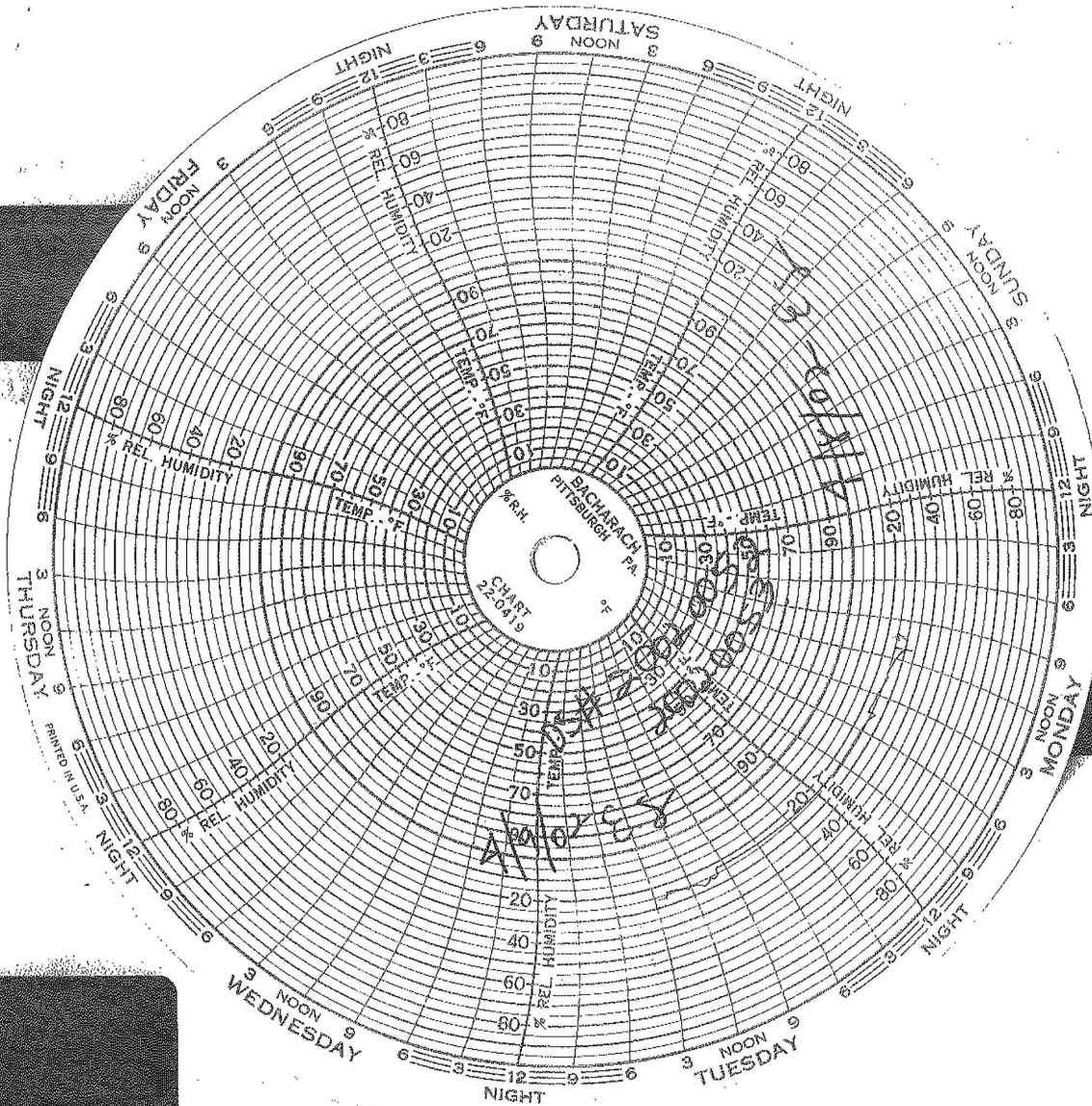
AVG. RECORDER RESP. 17.5 TEMP °C K FINAL WT g

ELAPSED TIME 1440 MINUTES PRESS mmHg INITIAL WT g

FLOW m³/min TOTAL FLOW m³ SAMPLE WT g

STD ACTUAL PM-10 µg/m³

COMMENTS:



FILTER I.D.	TARE wt (g)	DUP wt (g)	EXPOSED wt (g)	EXPOSED wt DUP (g)	COMMENTS
Q6279981	4.3392		4.3641	4.3643	FAA 3/24/02
Q6279980	4.3277		4.3504		
Q6279979	4.3413		4.3581		
Q6279978	4.3286		4.3442	4.3441	FAA 4/9/02
Q6279977	4.3605				
Q6279976	4.3560				
Q6279975	4.3479	4.3482 ^{FAA}			
Q6279974	4.3368		4.3530		
Q6279973	4.3615		4.3809		
Q6279972	4.3590		4.3715		
Q6279971	4.3547		4.3756		
Q6279970	4.3729		4.3952		
Q6279969	4.3818		4.4137		
Q6279968	4.3362	4.3364 ^{FAA}	4.3460		
Q6279967	4.3575		4.3700		
Q6279966	4.3708		4.4341		
Q6279965	4.3650		4.4242		
Q6279964	4.3367		4.3807		
Q6279963	4.3710		4.3690		
Q6279962	4.3820	4.3821 ^{FAA}	4.3947 4.3905	4.3915	
Q6279961	4.3700	4.3682	4.3682		
Q6279960	4.3595		4.3882		
Q6279959	4.3471		4.4685		
Q6279958	4.3600		4.4328	4.4328	

General information

Standard weights, actual (g)

Balanced weights, balanced (g)

General information	Standard weights, actual (g)	Balanced weights, balanced (g)
SARTORIUS	(500+200 ^(mg) +200+100)	1.0000 1.0001
S/N 37010119		2.0000 2.0000
5/26/2002 E.S.		5.0000 4.9999

ADD	100.0	99.97
HF-2002	5.00	5.00
SIN 12840548	10.00	10.00
4/8/02 FAA	20.00	20.01
	50.00	FAA 49.50 50.00
		4/8/02

SARTORIUS	(500+200 ^{mg} +200+100)	1.0000 1.0000
S/N 37010119		2.0000 2.0001
4/9/02 E.S.		5.0000 5.0001

METTLER AG285	0.1000 0.1000
S/N 1120181838	0.2000 0.2000
4/9/02 FAA	0.5000 0.5000